REMARKS

By this amendment, claims 1-8 are pending, and claims 1-7 are amended for the Examiner's consideration. Support for the amendments is provided in at least Figures 4-13 and at pages 6 and 16 of the present specification. No new matter is added. Reconsideration of the rejected claims in view of the above amendments and the following remarks is respectfully requested.

35 U.S.C. §103 Rejections

Claims 1-6 and 8 are rejected under 35 U.S.C. §103(a) as being unpatentable over U. S. Patent Application Number 2003/0007108 issued to Hwang, *et al.* (Hwang) in view of U. S. Patent Application No. 2002/0195609A1 issued to Yoshitake, *et al.* (Yoshitake), and in further view of U. S. Patent Application 5,554,407 issued to Ikeda *et. al.* (Ikeda). This rejection is respectfully traversed.

In order for an obviousness rejection to be proper, the references must teach each element of the claimed invention. Also, there must be some motivation either in the references themselves or in the knowledge generally available to a person skilled in the art to combine the references. Finally, there must be a reasonable expectation of success. Failure to establish any one these requirements renders the rejection invalid.

Hwang and Yoshitake

In this case, as the Examiner admitted at page 3, paragraphs 1 and 2 of the Office Action,

the combination of Hwang and Yoshitake fails to teach the elements of claim 1, which recites, in part:

> a plurality of storage electrodes formed on the substrate, each storage electrode including a plurality of branches;
>
> wherein at most one of the branches of each storage conductor has an isolated end.

Ikeda

With respect to Figure 10(b) of Ikeda, the Examiner suggested that it showed an electrode 19 which has a discontinuity portion 24 according to the defective layers portions beneath it. This suggestion, however, does not appear to be correct. Applicants respectfully submit that Ikeda is directed to preventing dielectric breakdown from occurring when a portion of a thin film piezoelectric element becomes defective. Ikeda specifically teaches that a common electrode, piezoelectric element, and separate electrode are sequentially formed on a substrate. When a defective portion 24 of a piezoelectric element is detected, a discontinuity portion 25 (not 24 as the Examiner suggested) is formed in an area of the common electrode 17 directly beneath or above the defective portion. The discontinuity portion is then filled with an insulating material 22 to ensure that any applied voltage is locally absent from the discontinuity portion. Applicants respectfully submit two important distinctions:

> a. Ikeda discloses a plurality of separate electrodes 19, but not one of these electrodes has a plurality of branches as claimed; and
>
> b. Ikeda discloses forming a discontinuity portion 25 in a common electrode 17, but this discontinuity is not used to form an isolated end of a storage electrode as claimed.

Thus, adding Ikeda does not cure the deficiencies of Hwang and Yoshitake.

No Motivation to Combine References

Moreover, as shown below, there is no motivation to combine the references as suggested by the Examiner. First, Ikeda is non-analagous because it is directed exclusively to the ink jet printer art, and not to the flat panel display art of the claimed invention. Nothing in Ikeda even remotely suggests that its teachings could be implemented in anything other than an ink jet printer. Yoshitake and Hwang relate to flat panel displays generally, but the problems solved by each are so different that a person skilled in the art attempting to solve the problems addressed Yoshitake would not be motivated to seek suggested solutions in Hwang, and vice versa. For example, Hwang is directed to an array substrate of a liquid crystal display that is capable of increasing the electrostatic capacitance of a storage capacitor while preserving the aspect ration of the LCD. Specifically, Hwang addressed the problem of how to increase the area of storage electrodes without decreasing the aperture ratio of the LCD.

On the other hand, Yoshitake attempts to solve the problem of low light output efficiency normally associated with conventional LED's that are packaged with transparent resin material. In particular, Yoshitake teaches forming protrusions 20 on the surface of a cladding layer to reduce the probability of incident light suffering total internal reflections between the topmost layer of a multilayer LED structure and the transparent resin. Clearly the teaching of increasing the area of storage electrodes espoused by Hwang is contrary to forming conical protrusions 20 on the surface of a cladding layer as taught by Yoshitake. Finally, neither Hwang nor Yoshitake references or suggests referencing the ink jet printer art addressed by Ikeda. Thus, a person

skilled in the art would not have been motivated to combine these references as suggested by the Examiner.

Yamakita

Dependent claim 7 was rejected over Ikeda, in view of Hwang, in view of Yoshitake, in further view of Yamakita. However, the addition of Yamakita does not cure the deficiencies of the other three references. For example, Yamakita specifically attempts to solve the problem of increasing the reliability of the spray-bend transition in a LCD to eliminate luminescent spots, or dot defects in the display. In particular, Yamakita teaches forming a lack portion in an electrode so that when a potential difference is generated between that electrode and another electrode, the electric field strength in the region around the lack portion was increased. Clearly the teaching of increasing the area of storage electrodes espoused by Hwang is contrary to forming lack portions (e.g., reducing electrode area) in electrodes as taught by Yamakita. Finally, neither Hwang, nor Yoshitake, nor Yamakita references or suggests referencing the ink jet printer art addressed by Ikeda. For these reasons, a person skilled in the art would not have been motivated to combine the teachings of these references.

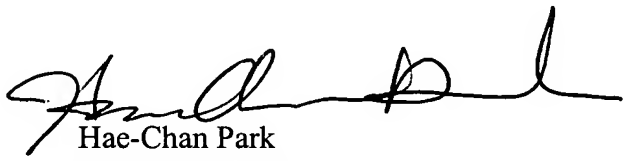
In any event, as described above, even if the teachings of Hwang, Ikeda, Yoshitake, and Yamakita were combined, they still would not teach each element of the claimed invention. For these reasons, Applicants respectfully submit that claim 1 and all the claims dependent therefrom are allowable over the cited references. Accordingly, it is respectfully requested that the rejection of claims 1-6 and 8 be withdrawn. Claim 7, being dependent on claim 1, is also

allowable for the reasons stated above, in addition to its added features. Consequently, Applicants respectfully request that the rejection of claim 7 be withdrawn.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants submit that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed. Applicants hereby make a written conditional petition for extension of time, if required. Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 23-1951.

Respectfully submitted,



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